## **REMARKS**

The Office Action mailed July 11, 2008 has been received and carefully noted. Claims 1-7 are currently pending in the subject application and are presently under consideration.

Claims 1-3 and 7 have been amended herein to correct minor informalities. A listing of claims can be found on pages 2-4 of this Reply.

Favorable reconsideration of the pending claims is respectfully requested in view of the following amendments and comments.

## I. Rejection of Claims Under 35 U.S.C. § 103(a)

Claims 1-5 are rejected under 35 U.S.C. §103(a) as being unpatentable over Namekata (U.S. Patent No. 5,673,294), in view of Goldstein *et al.* (U.S. Patent No. 6,002,713). Claims 6-7 are rejected under 35 U.S.C. §103(a) as being unpatentable over Namekata, Goldstein, and Limberg *et al.* (U.S. Patent No. 6,426,780). We respectfully request reconsideration and withdrawal of these rejections for the following reason. The cited references, combined, fail to teach or suggest all the limitations of the claims.

The present Application involves an equalizer having rapid convergent speed that withstands high level of distortion in a communications environment. The equalizer updates a tap coefficient of filters using a Kalman algorithm rather than an LMS algorithm. In particular, independent claims 1 and 7 recite "a tap coefficient updating block for updating a tap coefficient of the filters by using the calculated error signal and the Kalman gain."

The Examiner concedes that Namekata does not teach this aspect, but contends that Goldstein teaches "a tap coefficient updating block for updating a tap coefficient of the filters" at Figure 4, item 131 and 139 (See Office Action, pg. 5). However, such contention does not appear to include the aspect of the specific limitations of the tap coefficient updating block, specifically **how** the tap coefficient of the filters are updated. The independent claims recite that the updating is achieved "by using the calculated error signal and the Kalman gain." The subject claims do not simply indicate that the tap coefficient is updated, but present a particular manner of how they are updated, *i.e.*, using the calculated error signal and the Kalman gain. While the Examiner relies on Namekata for the aspects of calculating a Kalman gain and calculating an error signal, it does not appear obvious to one having ordinary skill in the art that these aspects

would be applied to the updating block, which typically does not involve a Kalman algorithm, as explained on page 7 of the Specification. Thus, we do not believe that Namekata and Goldstein, combined, teach or suggest all the limitations of the independent claims. There is no indication that Limberg cures any of the above deficiencies. The same arguments apply to the dependent claims by virtue of their dependencies on independent claim 1. In view of the above, we respectfully request reconsideration and withdrawal of these rejections.

## **CONCLUSION**

In view of the foregoing, it is believed that all claims now pending patentably define the subject invention over the prior art of record, and are in condition for allowance and such action is earnestly solicited at the earliest possible date. If the Examiner believes a telephone conference would be useful in moving the case forward, he is encouraged to contact the undersigned at (310) 207-3800.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2666 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17, particularly extension of time fees.

Respectfully submitted,

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| Dated: | 16/8 | , 2008 | W             |                    |
|--------|------|--------|---------------|--------------------|
|        |      |        | Eric S. Hyman | (\ Reg. No. 30,139 |

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I hereby certify that this paper is being transmitted online via EFS Web to the Patent and Trademark Office, Commissioner for Patents, Post Office Box 1450, Alexandria, Virginia 22313-1450, on 10-9-08, 2008.

Christine Flores